

Dr. Mohammed Abuelhassan Saleem

(Algebraic Geometry, Ph.D.)

Mathematics Department, Faculty of Science, Sohag University, Egypt.

Date of Birth: 19th of July, 1969 Nationality: Egyptian

PERMENENT

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ACADEMIC CAREER

| DEGREE | YEAR |
|---|------|
| B.Sc. (Mathematics) Excellent | 1991 |
| M.Sc. (Complex analysis) South Valley University, Egypt, with title "On the convergence properties of associated sets of polynomials of several complex variables" | 1996 |
| Ph. D. (Algebraic Geometry) Saitama University, Japan, with title "On the classification of rational plane curves of types (d,d-2) and (d,d-3,1)" | 2004 |

EXPERIENCE

| POST | YEAR | INSTITUTION | NATURE OF DUTIES |
|--------------------|-----------------|---------------------------|------------------------------|
| Assistant Lecturer | 1993-2000 | South Valley University | Teaching/Research for M. Sc. |
| Ph. D. Student | 2000-2004 | Saitama University, Japan | Ph.D. student |
| Lecturer | 2004-2005 | South Valley University | Teaching/Research |
| JSPS Fellow, Japan | 2005-2007 | Saitama University, Japan | Research and Teaching |
| Lecturer | 2007- 2016 | Sohag University | Teaching/Research |
| Assoc. Prof. | 2016- until now | Sohag University | Teaching/Research |
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HONOURS AND AWARDS

- 1- Awarded a grant from Egyptian government for getting PhD from abroad, 2000-2004
- 2- Awarded the JSPS fellow for two years in JAPAN, 2005-2007

CONFERENCES AND WORKSHOPS ORGANIZED

In my capacity as Organizing Secretary or Chairman or a member, I have organized the following workshops or conferences.

- 1. I helped in organizing the Mini-Conference on Algebraic Geometry (Saitama University) February 21-22, 2006, Japan.
- 2. I helped in organizing the Mathematical Society of Japan Meetings, 27-30 March, 2007, Saitama University, Japan.
- 3. I have organized the International conference in Mathematics and information security and acting as the general secretary, Sohag, 13-15 November, 2009, Egypt.
- 4. I have organized a Lecture of Prof. Peter Leach, South Africa in Mathematics Department, 17th of November 2009, Sohag, Egypt.
- 5. I have organized the 2nd International conference on Mathematics and information science and acting as the general secretary, Sohag, 10-13 September, 2011, Egypt.
- 6. I have organized the 3nd International conference on Mathematics and information science and acting as the general secretary, Luxor, 27-30 December, 2013, Egypt.
- 7. A member of the organizing committee of ICAAMMP 2014 International Conference on Advanced in Applied Mathematics and Mathematical physics, which will be held in 19-21 Aug. 2014 Istanbul, Turkey.
- A member of the Scientific committee of the First National Conference for Mathematics & its Application (NCM) which will be held in Guesthouse- Ain Shams Univ., December, 14-16, 2014.
- A member of the organizing committee of the 4^{rth} International conference on Mathematics and information science, Zeiwel city of Technology, Cairo, Egypt, 5-7 February, 2015, Egypt.
- A member of the organizing committee of the International Conference on Pure and Applied Sciences, Luxor, Egypt, Mar. 28-30, 2015.

MAIN RESEARCH INTERESTS

- Algebraic Geometry
- Singularities of Plane Curves
- Weierstrass points
- Birational Algebraic Geometry
- Projective differential geometry.
- Complex analysis
- Clifford Algebra
- Clifford analysis

TEACHING EXPERIENCE

a) Undergraduate Courses

Algebra A, Algebra B, Algebra C, Analytic Geometry, Solid Geometry, Transformation, Geometry, Linear Algebra, Statistics, Introduction to Plane Curves, Complex Analysis, Introduction to Computer Science. Differential Calculus and its Applications, Integral I, II and III, Introduction to Probability and Statistics, Mathematics for Computer Science, Differential Equations and Computer Algebra, Computer Applications in Mathematics.

b) Graduate Courses

Group theory, Mathematical Analysis, Advanced Abstract Algebra, Advanced Linear Algebra, Advanced Complex Analysis, Introduction to Algebraic Geometry, Lie Algebra.

Professional Membership

- Member of the Board of the Egyptian Mathematical Society Committee
- Member of the Japanese Mathematical Society (2000 -2009)
- Member of the Board of Scientific Professions Association Sohag.
- Member of the Board of the National Committee for Mathematics in the Academy of Scientific Research and Technology, Egypt.

PUBLICATIONS

- 1. Z. M. Kishka and Mohammed A. Saleem "Effectiveness of associated sets of polynomials of several complex variables in spherical regions" Sohag Pure & Appl. Sci. Bull., Fac. Sci. Assiut Univ., 10 (1994), 141-181.
- 2. Mohammed A. Saleem "On the classification of rational plane curves of types (d,d-2) and (d,d-3, 1)" Ph.D. Thesis, Saitama University, Japan, September 2004.
- 3. F. Sakai, Mohammed A. Saleem "Rational plane curves of type (d,d-2) "Saitama Math. Journal, 22 (2004), 11-34.
- 4. F. Sakai, Mohammed A. Saleem and K. Tono "Hyperelliptic plane curves of type (d,d-2) " Contributions to Algebra and Geometry, 51, No. 1, (2010) 31-44.
- 5. S. Z. Rida, M. A. Abul-Dahab, M. A. Saleem and M. T. Mohammed: On Humbert matrix function Ψ1(A;B;C;C`; z,w) of two complex variables under differential operator. Int. J. Indus. Math., Vol 2, (2010) pp.167-179.
- 6. Mohammed. A. Saleem, M. Abul-Ez and M. Zayed "On polynomial series expansions of Cliffordian functions" AIP Proceeding (ICNAAM 2010 Greece, Sept.2010), p.1523-1526.
- 7. S. Z. Rida, M. Abul-Dahab, M. A. Saleem, M. T. Mohamed "On Humbert Matrix Function ^a1(A;B;C;C0; z;w) of two Complex Variables under Differential Operator" Vol. 2, No. 3 (2010) 167-179.
- 8. M. A. Saleem, M. Abul-Ez, and M. Zayed,"On polynomial series expansions of Cliffordian functions", Math. Meth. Appl. Sci, vol. 35, (2012) p. 134-143.
- 9. Z. M. G. Kishka, M.Saleem, M. T. Mohamed and M. Abul-Dahab, On The p and q-Appell Matrix Function, Southeast Asian Bulletin of Mathematics 36, (2012) 837–848.
- 10.Z. Kishka, M. Abul-Ez, M. Saleem and H. Abd-Elmaged, On the order and type of entire matrix functions in complete Reinhardt domain, "J. M. M. Nume. Math.", Vol 3, (2012) P. 31-40.

- 11.M. Abul-Ez, M. Saleem, H. Abd-Elmaged and J. Morais, On polynomial series expansions of Cliffordian functions in open balls and at the origin, "Clif. Anal. Clif. Alge. Appl.", Vol. 1, (2012) P. 291-307.
- 12.Z. Kishka, M. Abul-Ez, M. Saleem and H. Abd-Elmageed, L'Hospital Rule for Matrix Functions .Journal of the Egyptian Mathematical Society Vol. 21, (2013) PP. 115-118.
- 13.Z. Kishka, M. A. Saleem and M. Abul-Dahab (2013): On simple exponential sets of polynomials. Mediterr. J. Math. Vol. 11, No. 2 (2014), 337–347.
- 14.M. Abul-Dahab, M. A. Saleem and Z. M. Kishka: On the effectiveness of the exponential Ruscheweyh differential operator product sets in \$\Bbb{C}^{n}\$,..J. Con. Appl. Math.., Vol 12, (2014) pp. 234-248.
- 15. Mohammed A. Saleem and Eslam E. Badr, Gap sequences of 1-Weierstrass points on non-hyperelliptic curves of genus 10, Journal of the Egyptian Mathematical Society 22 (2014), pp. 317-321
- 16.Mohammed A. Saleem and Eslam E. Badr, Classification of 1-Weierstrass points on Kuribayashi quartics, I (with two parameters), Electronic Journal of Mathematical Analysis and Applications Vol. 2(2) July 2014, No. 21, pp. 214-227.
- 17. Alwaleed Kamel and Mohammed A. Saleem "The Inflection points of high multiplicity on smooth plane curves and Weierstrass points" Accepted in JP Journal of Geometry and Topology, Vol. 15, No. 1, (2014) pp. 65-70.
- 18.Mohammed A. Saleem "On classifications of rational sextic curves" Journal of the Egyptian Mathematical Society, in Press.

Talks

- 1. *M. Saleem: Rational plane curves of type (d,d-2).* Math. Soc. Japan Meetings (Tsukuba University), March 29, 2004, JAPAN.
- 2. *M. Saleem: Rational plane curves of type (d,d-2) I, Classification.* Algebraic Geometry, Mini-conference, Saitama University, March 2, 2004, JAPAN.
- 3. M. Saleem: Hyperelliptic plane curves of type (d,d-2) I, ICM2006 Madrid, SPAIN.
- 4. *M. Saleem*: Plane curves of *type* (*d*,*d*-2) *with positive genus*. Math. Soc. Japan Meetings (Osaka City University), Sep. 21, 2007, JAPAN.
- 5. *M. Saleem*: Hyperelliptic *plane curves of type (d,d-2), Classification*. Algebraic Geometry, Mini-conference, Saitama University, March 2, 2007, JAPAN.
- 6. *M. Saleem*: *On polynomial series expansions of Cliffordian functions*, 8th International Conference of Numerical Analysis and Applied Mathematics, Greece, Sept. 2010.
- 7. *M. Saleem*: On classifications of rational plane curves of type (6,3), International Conference on Mathematics, Trends and Development ICMTD12, 27 29 Dec. 2012, Cairo, Egypt.
- 8. *M. Saleem*: On automorphism groups of degree 6 non-hyperelliptic curves Groups, Group Rings & Related Topics (GGRRT 2013), UAE, October 28-31, 2013.

Attending Conferences and Workshops

- 1. Mathematical Society Japan Meetings (Chiba University), 24-27 September, 2003, JAPAN.
- 2. Mathematical Society Japan Meetings (Tsukuba University), 28-31 March, 2004, JAPAN.

- 3. Third Franco-Japanese Symposium on Singularities, 13-17 September, 2004, Sapporo, JAPAN.
- 4. Mathematical Society Japan Meetings (Hokkaido University), 19-22 September, 2004, JAPAN.
- 5. Algebraic Geometry and Beyond, RIMS, Kobe University, 12-16 December, 2005, JAPAN
- 6. the Mini-Conference on Algebraic Geometry (Saitama University) February 21-22, 2006, Japan.
- 7. Satellite Conferene: Algebraic Geometry, Universidad de Valladolid, 16-19 August, 2006, Segovia, SPAIN.
- 8. International Congress of Mathematians, ICM2006 Madrid, 22-30 August, SPAIN.
- 9. Third Symposium on Algebraic Curves, Chuo Univ, Tokyo, 2006, JAPAN
- 10. Mathematical Society Japan Meetings (Osaka University), 19-22 September, 2006, JAPAN.
- 11. Mathematical Society Japan Meetings (Saitama University), 27-30 Marh, 2007, JAPAN.
- 12. Fourth Franco-Japanese Symposium on Singularities, 27-31 August, 2007, Toyama, JAPAN.
- 13. Math. Soc. Japan Meetings (Osaka City University), Sep. 21, 2007, JAPAN.
- 14. Second International Conference in Mathematics, 27-30 December, 2007, Cairo, EGYPT.
- 15. The International conference in Mathematics and information security, Sohag, 13-15 November, 2009, Egypt
- 16. The 2nd International conference on Mathematics and information science, Sohag, 10-13 September, 2011, Egypt.
- 17. The 3nd International conference on Mathematics and information science, Luxor, 27-30 December, 2013, Egypt.
- 18. The 8th International Conference of Numerical Analysis and Applied Mathematics, Greece, Sept. 2010.
- 19. International Conference on Mathematics, Trends and Development ICMTD12, 27 29 Dec. 2012, Cairo, Egypt.
- 20. International Conference on Groups, Group Rings & Related Topics (GGRRT 2013), UAE, October 28-31, 2013.
- 21. The First National Conference for Mathematics & its Application (NCM) which will be held in Guesthouse- Ain Shams Univ., December, 14-16, 2014.
- 22. The 4rth International conference on Mathematics and information science, Zeiwel city of Technology, Cairo, Egypt, 5-7 February, 2015, Egypt.

| | M. Sc. and Ph. D. Dissertations Supervised | | |
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| S. # | NAME OF STUDENT | YEAR (TYPE) | TITLE OF THETHESIS |
| 1. | Alwaleed Kamel Abdel-Aal (Egypt) | 2006 (M. Sc.) | On geometry and algebraic classification for certain classes of rational plane curves of type (d,d-3) |

| 2. | Hala Mohammed Abdel Mageed | Marsh, 2013 (M. Sc.) | On power series expansion of some analytic functions |
|----|----------------------------|----------------------|---|
| 3. | Asem Ahmsed Mahmoud | July, 2013 (M. Sc.) | On Intersection Curves of Special Surfaces in Euclidean Space |
| 4. | Amr Mohammed Elrawy | July, 2013 (M. Sc.) | On Classifications of Weierstrass Points of Certain Plane Curves Using Groebner Bases |
| 5. | Eslam Esam Badr | Dec., 2013 (M. Sc.) | Geometry of Higher Order and Multiple Weierstrass Points on Some Riemann Surfaces |
| 6. | Waleed Khalid Khalaf | - | Geometry of Higher Order Weierstrass Points of certain curves |

Quality Assurance and Accreditation

First: Participating in committees, standards of Quality and Units

- The head of the teamwork in the higher studies standard From December, 22nd 2010 until now.
- A member of the supervision committee to carry on the maxims of the National Association on November 26th, 2010.
- A member in the team assigned to make the annual report of the Faculty of Science on October, 25th 2011, November 4th 2011.
- A member in the committee responsible for answering questions concerning the external report of sustainability on Dec, 27th 2011.
- A member in the committee of the Electronic Education on April, 11th 2011 to February, 15th 2012.
- A member in the committee responsible for the completion of the files in the external research laboratories on Marsh, 20th 2012.
- A member in the working team for the standard of qualification on Jan, 1st 2013.
- A member in the working team for strategic planning standard on April, 13th 2013.
- A member in the working team for the annual report of the Faculty of Science on Oct, 11th 2014.

Second: Participating in meetings

- Attended the meeting of the team of the Faculty responsible for carrying out the standards to obtain sustainability. The meeting was attended by the head of the University of Sohag on Marsh, 15th 2010.
- Attended the meetings in preparation for the Visit made by the National Authority for Quality Assurance and Accreditation of Education on April, 26th 2011 and on May 15th -16th 2011.
- Attended the meeting given to answering the questions concerning the report written by the external revision for accreditation on Sep, 14^{th} 2011.
- Attended the meeting of the executive committees the Quality Unit on Dec, 27th 2011.

- Attended the Faculty administration meeting in which the staff members and their assistants to prepare for the visit made by the committee for external revision on May 6^{th} 2012.
- Attended the meeting of the Dean with the Faculty staff and their assistants to prepare for the visit made by the National Authority for Quality Assurance and Accreditation of Education on Feb, 13th 2012.
 - Attended the meetings between the dean of the Faculty with the heads of the standards of quality from December, 22nd 2010 until now.

Third: Participating in workshops, courses, seminars and conferences

- Attended a workshop regarding the description and reports of the courses and programs on Oct, 8th 2008.
- Attended a workshop regarding the institutional capacity and educational involvement on Oct, 18th 2008.
- Attended a workshop regarding the activities and achievements of the continuous development program for qualification and accreditation on Oct, 20th 2008.
- Attended a workshop regarding the academic standards and its inevitability on Dec, 29th 2009.
- Attended a workshop regarding the functional description on Nov, 1st 2009.
- Attended a workshop discussing how to make an exam format or paper on May, 22nd 2010.
- Attended a workshop regarding the authorial ownership on Jan, 26th 2010.
- Attended a workshop regarding a training course tackling the description and reports of courses and programs for B. S. and higher studies on Marsh 29th 2010.
- Attended a workshop regarding the way to carry out the standards of the National Authority on May, 29th 2010.
- Attended a workshop regarding the description of the courses in the light of feedback given by the external examiners on Jan, 1st 2011.
- Attended a workshop regarding the self-study of the Faculty on Fab, 8th 2011.
- Attended a workshop regarding the standards of the exam paper April, 19th 2011.
- Attended a workshop regarding the participating of the civil society in developing and modernizing the institutional capacity and educational involvement of the Faculty of Science on Sep, 28th 2011.
- Attended a workshop regarding the role Plasma application laboratory in the service of the society on Sep, 28th 2011.
- Attended a workshop regarding the authorial ownership and strategic planning on Fab, 29th 2012.
- Attended a symposium entitled "Hepatitis C: Protection and Cure" on Fab, 24th 2013.
- Attended a course of how to transfer the text courses into electronic courses on Nov, 10th 11th 2013.
- \bullet Attended an academic seminar entitled "the problems of energy and rationalizing consumption on June 4th 2013.
- \bullet Attended a course of the external revision for the educational institutions of Higher Education on Dec, $23^{rd}-25^{th}$ 2014.

Other Experiences in the University

Director of the Training Centre of information technology systems and communications

| Languages | | | |
|-----------|---------------|-----------|-----------|
| Language | Reading | Writing | Speaking |
| Arabic | mother tongue | | |
| English | Excellent | Excellent | Excellent |
| Japanese | Good | Good | Good |

References

| | Name | Address |
|---|-----------------------|---------------------------|
| 1 | Prof. Fumio Sakai | Saitama University, Japan |
| 2 | Prof. Tushi Fuckui | Saitama University, Japan |
| 3 | Prof. Mohamed Hussien | Al-Azhar Unibersity |